

THE AMENDMENT

In the Claims:

1-62. (canceled)

63. (previously presented) A process for the preparation of a liquid crystal display, which process comprises the steps of:

- a) providing microcups;
- b) filling the microcups with a liquid crystal composition and a dispersion of a thermoset or thermoplastic precursor which has a specific gravity lower than that of the liquid crystal composition; and
- c) sealing the filled microcups by hardening the thermoset or thermoplastic precursor dispersion during or after it phase separates and forms a supernatant layer above the liquid crystal composition.

64. (previously presented) The process of Claim 63 wherein the liquid crystal composition comprises guest dye(s).

65. (previously presented) The process of Claim 63 wherein the thermoset or thermoplastic precursor dispersion comprises a material selected from the group consisting of acrylates or methacrylates, vinyls, polyvalent acrylates or methacrylates, cyanoacrylates, polyvalent vinyls, polyvalent epoxides, polyvalent isocyanates, polyvalent allyls, and oligomers or polymers derived therefrom.

66. (previously presented) The process of Claim 65 wherein said polyvalent vinyl is vinyl benzene, vinylsilane, or vinyl ether.

67. (previously presented) The process of Claim 65 wherein said oligomers or polymers are derived from those containing crosslinkable functional groups.

68. (previously presented) A process for the preparation of a liquid crystal display, which process comprises the steps of:

- a) providing microcups;
- b) filling the microcups with a liquid crystal composition;
- c) sealing the filled microcups by overcoating onto said liquid crystal composition a thermoset or thermoplastic precursor composition which is at least

partially immiscible with said liquid crystal composition and has a specific gravity lower than that of said liquid crystal composition; and

- d) hardening said thermoplastic or thermoset precursor composition.

69. (previously amended) The process of Claim 68 wherein the thermoplastic or thermoset precursor composition is diluted with a volatile solvent or solvent mixture which is evaporated after said thermoplastic or thermoset precursor composition is overcoated onto the liquid crystal composition.

70. (previously presented) The process of Claim 68 wherein the thermoplastic or thermoset precursor composition is cured by radiation, heat, moisture, or interfacial reactions at the interface between the thermoplastic or thermoset precursor composition and the liquid crystal composition.

71. (previously presented) The process of Claim 68 wherein the thermoplastic or thermoset precursor composition comprises a material selected from the group consisting of acrylates or methacrylates, vinyls, polyvalent acrylates or methacrylates, cyanoacrylates, polyvalent vinyls, polyvalent epoxides, polyvalent isocyanates, polyvalent allyls, oligomers or polymers derived therefrom.

72. (previously presented) The process of Claim 71 wherein said polyvalent vinyl is vinyl benzene, vinylsilane, or vinyl ether.

73. (previously presented) The process of Claim 71 wherein said oligomers or polymers are derived from those containing crosslinkable functional groups.

74. (currently amended) A process for the manufacture of a liquid crystal display, which process comprises the steps of:

- a) preparing microcups on a first conductor film;
- b) filling the microcups with a liquid crystal composition;
- c) sealing the filled microcups with a thermoplastic or thermoset precursor composition which has a specific gravity lower than that of the liquid crystal composition; and
- d) laminating the sealed microcups with a second conductor film to form a liquid crystal display.

75. (previously presented) The process of Claim 74 wherein said second conductor film is pre-coated with an adhesive layer which is hardenable or crosslinkable by heat, moisture or radiation and curable during or after lamination.

76. (currently amended) A process for the manufacture of a multi-color liquid crystal display, which process comprises the steps of:

- a) preparing microcups on a first conductor film;
- b) laminating the microcups with a layer of a positive photoresist;
- c) imagewise exposing the positive photoresist to selectively open the microcups in a predetermined area;
- d) filling the opened microcups with a liquid crystal composition of a first color;
- e) sealing the microcups filled with the liquid crystal composition of the first color with a thermoplastic or thermoset precursor composition which has a specific gravity lower than that of the liquid crystal composition;
- f) repeating Steps c) to e) in different areas with liquid crystal compositions of different colors to generate groups of microcups filled with the liquid crystal compositions of different colors;
- g) removing residual positive photoresist, if any; and
- h) laminating the sealed microcups with a second conductor film to form a multi-color liquid crystal display.

77. (currently amended) The process of Claim 74 wherein the filling and sealing of the microcups is accomplished by filling the microcups with the liquid crystal composition and a dispersion of a ~~said~~ thermoplastic or thermoset precursor composition ~~which has a specific gravity lower than that of the liquid crystal composition~~, followed by hardening the thermoplastic or thermoset precursor composition during or after it phase separates and forms a supernatant layer above the liquid crystal composition.

78. (previously presented) The process of Claim 74 wherein the liquid crystal composition comprises guest dye(s).

79. (currently amended) The process of Claim 76 wherein the filling and sealing of the microcups is accomplished by filling the microcups with the liquid

crystal composition and a dispersion of a said thermoplastic or thermoset precursor composition ~~which has a specific gravity lower than that of the liquid crystal composition~~, followed by hardening the thermoplastic or thermoset precursor composition during or after it phase separates and forms a supernatant layer above the liquid crystal composition.

80. (previously presented) The process of Claim 76 wherein the liquid crystal composition comprises guest dye(s).

81. (currently amended) The process of Claim 74 wherein the sealing of the filled microcups is accomplished by overcoating onto the liquid crystal composition a said thermoplastic or thermoset precursor composition which is at least partially immiscible with said liquid crystal composition ~~and has a specific gravity lower than that of said liquid crystal composition~~, followed by hardening the thermoplastic or thermoset precursor composition.

82. (currently amended) The process of Claim 76 wherein the sealing of the filled microcups is accomplished by overcoating onto the liquid crystal composition a said thermoplastic or thermoset precursor composition which is at least partially immiscible with said liquid crystal composition ~~and has a specific gravity lower than that of said liquid crystal composition~~, followed by hardening the thermoplastic or thermoset precursor composition.

83. (canceled)

84. (previously presented) The process of Claim 76 wherein an adhesive layer is precoated on the positive photoresist.

85. (canceled)

86. (previously presented) The process of Claim 84 wherein said adhesive is developable by a developer of the positive photoresist.

87. (previously presented) The process of Claim 76 wherein color filters are laminated or coated onto the display.

88. (previously presented) The process of Claim 87 wherein said color filters are red, green or blue.

89. (previously presented) The process of Claim 63 wherein said microcups are washed before being filled.

90. (previously presented) The process of Claim 89 wherein said microcups are washed with hexane.

91. (previously presented) The process of Claim 89 wherein said microcups are washed with methylethylketone.

92. (previously presented) The process of Claim 68 wherein said microcups are washed before being filled.

93. (previously presented) The process of Claim 92 wherein said microcups are washed with hexane.

94. (previously presented) The process of Claim 92 wherein said microcups are washed with methylethylketone.

95. (previously presented) The process of Claim 74 wherein said microcups are prepared by embossing a thermoplastic or thermoset precursor layer with a male mold.

96. (currently amended) The process of Claim 74 wherein said microcups are prepared by imagewise exposing a ~~thermoplastic or thermoset precursor layer~~ of a radiation curable material and removing the unexposed areas.

97. (previously presented) The process of Claim 76 wherein said microcups are prepared by embossing a thermoplastic or thermoset precursor layer with a male mold.

98. (currently amended) The process of Claim 76 wherein said microcups are prepared by imagewise exposing a ~~thermoplastic or thermoset precursor layer~~ of a radiation curable material and removing the unexposed areas.

99. (previously presented) The process of Claim 76 wherein said second conductor film is pre-coated with an adhesive layer which is hardenable or cross-linkable by heat, moisture or radiation and curable during or after lamination.